FOURTH CHURCH PULPIT
September 9, 2001

FAITH AND SCIENCE: IS GOD THE RULER YET?
John M. Buchanan

The most beautiful thing we can experience is the mysterious. It is the source of all true art and science. He to whom the emotion is a stranger, who can us longer pause to wonder and stand rapt in awe, is as good as dead: his eyes are closed

Albert Einstein

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FOURTH PRESBYTERIAN CHURCH

LUKE 14:15-24
"Such Knowledge is too wonderful for me; it is so high that I cannot attain it."
(Psalm 139:6)

O Lord, you have searched us
and known us.
You know when we sit down and
when we rise up;
you discern our thoughts from
far away.
You search out our path and our
lying down,
and are acquainted with all our
ways.

Even before a word is on our
lips,
O Lord, you know it
completely.
Such knowledge is too
wonderful for us;
it is so high that we cannot
attain it. Amen (Psalm 139)

I have always particularly loved a passage from *Leaves of Grass* by Walt Whitman. It's about sitting in a classroom listening to a science lecture.

"When I heard the learn'd astronomer,
When the proofs, the figures, were ranged in columns
before me
When I was shown the charts and the diagrams
to add, divide and measure them;
When I, sitting, heard the astronomer where he lectured
with much applause in the lecture-room,
How soon, unaccountable, I became tired and sick;
Till rising and gliding out, I wander'd off
by myself.
In the mystical, moist night-air, and from time to time,
Look'd up in perfect silence at the stars."

I love that poetry because for years I have been doing what the narrator does — "walk out into the night air and from time to time look up in perfect silence at the stars." I do it at the ocean, every summer; after dark walk out to the beach, sit or lie down, and look up. It's a precious experience — not ordinarily available. The Royal Academy of Astronomy just published a map detailing degrees of human-made "light pollution" which shows that two-thirds of the people of the U.S.A. can no longer see the Milky Way. There's nothing quite like looking up into a night sky for putting things into perspective. Most of us, in that situation — that encounter with the magnificence and majesty of the natural world, experience awe, wonder, reverence. It is, for many of us, the closest we come to a religious experience.

Walt Whitman's point was that the analytical methodologies of science can actually work against the basic human experience of wonder. The charts and diagrams and numbers of science actually do not adequately describe the reality of the stars. There is, Whitman argues, another way of looking and seeing, knowing and experiencing and understanding.

That kind of statement, that there is a way of knowing — other than scientific, rational, empirical — used to get an argument from the closest scientist. And the amazing thing is that nobody much disagrees with it any more. There has been what some are calling a seismic shift in the relationship of religion and science after centuries of hostility and suspicion. There is a new openness on both sides, a growing sense, given the amazing new advances in astronomy and cosmology and sub-nuclear science, that, finally, scientists and theologians are up to the same thing, and at the end of the day, asking the same questions — "Who are we? What's the purpose? Where do we come from? Where are we going?"

Robert Jastrow, distinguished astronomer, put it delightfully: "For the scientist who has lived by his faith in the power of reason, the story ends like a bad dream. He has scaled the mountain of ignorance. He is about to conquer the highest peak; as he pulls himself over the final rock, he is greeted by a band of theologians who have been sitting there for centuries." [God and the Astronomers]

Things started to go badly between religion and science in the 16th and 17th centuries. A Polish astronomer by the name of Copernicus suggested that the sun, not the earth, was at the center of the solar system. Copernicus knew that his ideas would cause a lot of trouble and that the church particularly would find them difficult, because the church, based on its reading of scripture, knew that the earth was the center of all things. So Copernicus never said a word, and arranged for his ideas to be published after he died. When they were published they electrified the scientific community throughout Europe and they were condemned, not only by Rome, but also by the Reformers, Martin Luther and John Calvin.

In 1616 the Catholic Church banned all books that contained the heretical notion that the earth moved at all. And in 1632, a brilliant Italian, Galileo Galilei, did just that. Galileo had been tinkering with his telescopes, refining, enlarging. You can see them in a science museum in Florence. Some are huge — 10–12 ft. long. Galileo knew what he was seeing and when he published his findings he was summoned to Rome. In 1633 he got down on his knees and read a statement the Inquisition had prepared for him recanting his errors and promising never to speak or write about them again. But he must have had his fingers crossed. After his trial he was sent back to Florence, to house arrest in his villa – near the convent where his daughter Marie Celeste was a nun. He sent her food and herbs from his garden. She did his laundry. His sentence included reading daily the seven Psalms of Penitence. And the story is that his daughter read them to him as he sat by his window, with his telescope, watching the planets revolve around the sun ["The Luminous Web", Barbara Brown Taylor, *The Christian Century*, June 2-9, 1999]

It was a kind of high point, or low point, depending on your perspective, of religious triumphalism and it drove a wedge of suspicion and hostility between science and religion that stayed firmly in place for centuries. The church has had a hard time saying it made a mistake, that it was wrong, that it's information was wrong or at least incomplete. It still does. Galileo was only recently exonerated. But it is not confined to the Catholic Church. Protestant fundamentalist continue to fight for Creation Science – an approach that starts with a theological point of view and then looks for evidence to support it, and that just isn't science.

Charles Darwin's *The Origin of the Species*, drove the wedge deeper. The theory of natural selection and evolution seemed to leave out the necessity or possibility of a creator and religion attacked once again. In our country the 1925 Scopes Trial in Dayton, Tennessee, seemed to pit a narrow fundamentalism against enlightened science – and even though Scopes was found guilty, science clearly won the battle of public opinion.

This year, however, there is a new book, *Why Religion Matters* by Huston Smith, which argues that what we know about that whole incident has been shaped and radically distorted by Broadway and Hollywood in the play and movie "Inherit the Wind." In that portrayal, science comes off as knight in shining armor and religion as narrow, bigoted and ignorant. Smith argues that the movie exaggerated the dispute between religion and science to mythic proportion.

The result, Smith argues, is Scientism, a world view based on the notion that reality can only be defined scientifically. Our "sacral mode of learning" he calls it – a mode that registers nothing that is without a rational component... that nothing exists that cannot be analyzed and known empirically.... The best example of scientism Smith says was Carl Sagan, opening his television series Cosmos by announcing, "The Cosmos is all that is or ever was or ever will be."

What has happened fairly recently, however, is that science itself has been driven to acknowledge mystery — and the scientists are beginning to sound like theologians. The Templeton Foundation has published a handsome book of photographs taken from the Hubble telescope with the title *The Hand of God.* The Introductory essay is written by *Newsweek* Science editor Sharon Begley who observes, "The cosmos seems fine-tuned for existence, in an almost too-good-to-be-true manner." The argument has been around for a long time, but recent scientific discoveries have punctuated the improbability of life.

For instance, British Astronomer Fred Hoyle, who just died last week, discovered that carbon — the basic component of life, is created when three helium nuclei whizzing around a star collide simultaneously, same time, same place. Hoyle said it would be like three friends who lived at different parts of the earth, bumping into one another at a random street corner in a small town in Kansas at precisely the same moment. He called it a "monstrous series of accidents – as if the laws of nuclear physics have been deliberately designed with regard to the consequences they produce." Hoyle joked, "The universe looks like a put-up job." [p. 18 *The Hand of God*]

Alan Sandage, heir to Edwin Hubble, discovered that the universe was not static but expanding outward at just the right speed to keep expanding forever and then he began to be nagged by a distinctly theological question — "Why is there something rather than nothing?" Sandage wrote: "It was my science that drove me to the conclusion that the world is much more complicated than can be explained by science." Or, as the Psalmist observed:

> **Such knowledge is too**
> **Wonderful for me;**
> **it is so high that I**
> **cannot attain it.**

Sandage concluded: "I find it quite improbable that such order came out of chaos. There has to be some organizing principle. God to me is a mystery, but is the explanation for the miracle of existence, why there is something rather than nothing."

And Fred Hoyle popularized the improbability argument with his comment: "the chance of natural selection's producing even an enzyme is on the order of a tornado's roaring through a junk yard and coming up with a Boeing 747."

And so, we have come full circle in a sense. Isaac Newton never doubted that in discovering the laws of motion and gravity "he was being granted a glimpse of the operating manual of the creation God had assembled."

And a few centuries later Albert Einstein would say: "The important thing is not to stop questioning.... One cannot help but be in awe when he contemplates the mysteries of eternity ... science without religion is lame, religion without science is blind." [ibid]

Science, it seems, is newly open to mystery and to the insights of religion. And religion, I believe, must repent of the triumphalism of the past which led it to oppose scientific inquiry. My theological mentor, Joseph Sittler, used to teach that theology begins with modesty, with the acknowledgement that God is not, finally, altogether accessible to human reason, that God to be God, must remain a mystery to us and that honest religion includes questions for which there are no easy answers.

The new openness between science and religion arrives just in time as we confront the mysteries and enormous promise of stem cell research, for instance. I've tried, as you have, to read as much as I can – and the more I read the more uncomfortable I am with the moral absolutes on either side of the argument: those who see no problem with the creation and destruction of embryos for harvesting stem cells and with those who oppose use of any embryos for research and potential treatment. But, the whole matter was brought into perspective for me this week by a letter I received from a dear friend, Norm Pott, recently retired Presbyterian minister, fighting for his life in a San Francisco hospital, undergoing amazingly sophisticated therapy and treatment involving harvesting his own stem cells and a time of enormous discomfort and then, after describing the long, arduous journey, Norm wrote cheerfully, "I get to go home to enjoy life while my happy healthy stem cells do their miraculous thing ... with much love and gratitude," Norm.

Appropriate gratitude, I reflected, for science; for the human mind, restless, curious, unafraid of the unknown; gratitude for the disciplined commitment of the scientists, gratitude for the health care professionals, for hospitals and doctors and nurses.

And a deeper gratitude to the One who created and who continues to create; the God whose love is written in the beauty of the earth, and the magnificence of the night sky and the intricacies of the atom.

A century ago the distinguished zoologist Ernest Haeckel said that if he could have only one question answered authoritatively it would be — "Is the universe friendly?"

That's it, is it not? That's the question. On the day I wrote this sermon, I turned the manuscript over to the office, got in my car and drove to the western suburbs to attend to a mystery, a Memorial Service for a friend's son.

A great mystery ... a terrible mystery. A college senior, bright, sweet, loved his family, his church, an athlete, an officer in his fraternity, popular and two weeks ago he committed suicide.

And so a community gathered in a church — his friends, his parents' friends and professional colleagues, his church — gathered to attend to a mystery.

How in God's world — how in God's name did this happen? Why in a beautiful creation, fashioned by a just and merciful God, do things like this happen? Is the universe friendly?

The Lutheran pastor in his sermon used no euphemisms, said the terrible word "suicide," said that the power of death is real, in this world. But "death is a liar," he said.

The truth, he said, is that in this life loved ones do slip through our fingers, but we never slip out of God's hands.

Is the universe friendly? That finally is the question for all of us — in good times and not so good times, in health and in sickness, in success and failure, in birth and in death — is the universe friendly?

Religion says, yes. There is behind the universe One who, through a mystery, is fundamentally for us; one who created us and loves us and whose love for us is eternal.

And now, science itself, more and more stands along side, in silent wonder and awe.

The publisher of the *Templeton Foundation Book* of gorgeous photographs from the Hubble deep space telescope wrote – "when I look at the material I have a great sense of relief, an almost surreal sense that it's all going to be OK, we are not alone, and there is a God."

That same sense the poet described:

"I wander'd off by myself in the mystical, moist night air, and from time to time,

Look'd up in perfect silence at the stars."

And the Psalmist:

> **O Lord – such knowledge is too**
> **wonderful for me;**
> **it is so high that I cannot**
> **attain it.**

Or the old hymn we used to sing in Sunday school, every week, it seemed:

This is my Father's world.
All nature sings and round me rings
The music of the sphere.

This is my Father's world
Oh let me ne'er forget
That though the wrong seems oft so strong
God is the ruler yet.

Amen.